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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,659	11/20/2001	Magnus L. Olsson	040071-483	9022

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Ronald L. Grudziecki
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

ADAMS, JONATHAN R

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,659

Applicant(s)

OLSSON, MAGNUS L.

Examiner

Jonathan R Adams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9, 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim(s) 9, 19:

3. Claims 9, 19 expresses the transmission of data over a network while *offline*. The use of networked data transmission is contradictory to the accepted definition of offline. Please revise the terminology used for this claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1-6, 8-10, 12-20, 21-29, 30-33 rejected under 35 U.S.C. 102(e) as being anticipated by Giniger et al., US Patent No 6199045 (hereafter referred to as '045).

As to claim(s) 1:

6. '045 teaches a method for initiating a location based service from a third party service provider comprising:

- Encrypting a client's identification information using an encryption key obtained from a network location server / communications between the mobile unit and the central site server are encrypted (Col 6, Lines 19-21, '045), For performing security functions, the security element 802 utilizes an authentication and key exchange protocol, (Col 20, Lines 24-28, '045)
- Network location server maintains a record indicating a location associated with the identification information / The central site server 107 receives the position information from the mobile unit 103 and converts this information into a digital data format. The converted position information may then be stored in a second data record associated with the mobile unit 103 (Col 12, Lines 21-25, '045)
- Transmitting the encrypted identification information from the client to the service provider / The positioning system in this case also transmits a signal identifying this particular mobile unit 103, so that the central site server 107 can associate the received present position information with this mobile unit's connection (Col 21, Line 42-46, '045)
- Launching a location request from the SP to the NLS the location request including the encrypted identification information received from the client /

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Remote Access Server – Security Element – Server (Fig 8, Elements 801, 802, 805, '045), TCP/IP

(Col 15, Line 3, '045) networks use a request response communication structure

- Providing the location based service according to the response to the location request form the NLS / provide a position-related information delivery service to users (Col 5, Lines 12-15, '045)

7. As to claim(s) 2:

Location based service is provided directly to the client by the SP / provide a position-related information delivery service to users (Col 5, Lines 12-15, '045)

8. As to claim(s) 3:

Client is a mobile station in a cellular network / In a preferred embodiment, the bidirectional communications link is established through a cellular telephone network (Col 5, Line 55-58, '045)

9. As to claim(s) 4:

Transaction identification number is transmitted with the encrypted identification information / symmetric key crypto algorithm, key exchange protocol (Col 20, Lines 24-29, '045)

10. As to claim(s) 5:

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Transaction id number is encrypted to yield a one-time password prior to being transmitted with encrypted ID information / key exchange protocol, symmetric key crypto algorithm(Col 20, Lines 24-29, '045)

11. As to claim(s) 6:

Encryption key is a public key and client's ID is encrypted using a public key method / key exchange protocol, symmetric key crypto algorithm(Col 20, Lines 24-29, '045)

12. As to claim(s) 8:

Encryption key is obtained from the NLS while offline / see rejection for claim 7

13. As to claim(s) 10:

SP provides location based service according to a response to the location request form the NLS and according to a previously established schedule corresponding to the client / the mobile unit further comprises a timer; and means, coupled to the timer, for periodically sending updated position information to the central site server (Col 6, Lines 55-58, '045)

14. As to claim(s) 12-20:

Claims 12-20 correspond to claims 1-6, 8, and 10

15. As to claim(s) 21-23, 24-26:

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Claims 21-23 correspond to claims 1, 3, and 6

16. As to claim(s) 27-29, 30-33:

Claims 27-29, 30-33 correspond to claims 1-5

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 7, 11, 30 rejected under 35 U.S.C. 103(a) as being unpatentable over '045 in view of Bruce Schneier, "Applied Cryptograph".

As to claim(s) 7, 11, 30:

19. '045 teaches a method for initiating a location based service from a third party service provider using encrypted identification information and authentication over a TCP/IP communications network. '045 does not teach the use of digital signatures for authentication in a TCP/IP network. Schneier teaches the use of digital signatures to provide authentication in a TCP/IP network (Page 50, "Key Exchange with Digital Signatures", Schneier). It would have been obvious to a person of ordinary skill in the art at the time of invention to use the digital signature techniques taught in Schneier to provide the authentication in the invention of '045. One of ordinary skill in the art would have been motivated to use the digital signature techniques taught in Schneier to

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provide the authentication in the invention of '045 because the digital signature techniques taught in Schneier provide a standardized authentication method allowing for greater compatibility.


20. '045 as modified above does not teach that NLS uses a previously obtained public key. Schneier further teaches storing public keys in a local private database (Page 185, Paragraphs 4-6, Schneier). It would have been obvious to a person of ordinary skill in the art at the time of invention to use the local private database public key storage technique taught by Schneier to store a previously retrieved public key for the invention of '045 as modified above. One of ordinary skill in the art would have been motivated to use the local private database public key storage technique taught by Schneier to store a previously retrieved public key for the invention of '045 as modified above because storing keys locally reduces the need to access an outside source to obtain the key reducing system complexity.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R Adams whose telephone number is (571)272-3832. The examiner can normally be reached on Monday – Friday from 10am to 6pm.

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22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is (571)272-3838. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100